Claims

[c1]   1. A system for enriching a document, comprising:

a document editor for authoring the document; and

a directed search service for specifying a directed search while the document is authored with the document editor; the directed search service including search criteria and result parameters that may be specified by a user; the result parameters including information provider parameters, location parameters and form parameters; the information provider parameters identifying one or more information providers to perform the directed search and provide search results; the location parameters identifying where in the document the search results are to be inserted; and the form parameters specifying a form in which the search results are to be inserted into the document;

wherein the directed search service inserts the directed search in the document.

[c2]   2. The system according to claim 1, wherein the form parameters are one of a link, content, and metadata.

[c3]   3. The system according to claim 1, wherein one form parameter specifies how frequently the directed search is to be performed.

[c4]   4. The system according to claim 1, wherein the information provider parameters include language, quality, quantity, and cost.

[c5]   5. The system according to claim 4, wherein the search parameters includes means for specifying information providers according to a user defined criteria.

[c6]   6. The system according to claim 1, further comprising a meta-document server for performing the directed search and providing the search results by querying the information providers using the search criteria and inserting the search results in the document.

[c7]   7. The system according to claim 6, wherein the search results are integrated in the document while being authored with the document editor.

[c8]   8. A system for enriching a document, comprising:

a user interface for specifying a directed search while authoring a document, said user interface further comprising:

means for specifying search criteria of the directed search; and

means for specifying result parameters; the result parameters including information provider parameters, location parameters and form parameters; the information provider parameters identifying one or more information providers to perform the directed search and provide search results; the location parameters identifying where in the document the search results are to be inserted; and the form parameters specifying a form in which the search results are to be inserted into the document; and

a meta-document server communicating with the user interface for carrying out the directed search.

[c9] 9. The system according to claim 8, wherein the form parameters are one of a link, content, and metadata.

[c10] 10. The system according to claim 9, wherein one form parameter specifies how frequently the directed search is to be performed.

[c11] 11. The system according to claim 8, further comprising means for invoking the user interface from a document editor.

[c12] 12. The system according to claim 8, wherein the information provider parameters include language, quality, quantity, and cost.

[c13] 13. The system according to claim 12, wherein the search parameters includes means for specifying information providers according to a user defined criteria.

[c14] 14. The system according to claim 8, further comprising means for exporting the document for import at other meta-document servers.

[c15] 15. The system according to claim 14, further comprising means for importing an exported meta-document, said importing means creating a new meta-document with: first means for adding services in the new meta-document available at an importing meta-document server with services that map exactly to a predefined categorization; and for those services not added by said first adding means but specified in the exported meta-document, second means for adding services in the new meta-document available at the importing meta-document server with services that map partially to a predefined categorization, and have at least one dictionary and one key in common.

[c16]

16. The system according to claim 15, wherein dictionaries of two services are equivalent

if they map to the predefined categorization.

[c17]   17. The system according to claim 15, wherein two keys of a service map if they both reduce to a common generic key.

[c18]   18. In a document enrichment system, a method for creating at a meta-document server a new meta-document from an exported meta-document, comprising:
(a) adding services in the new meta-document available at an importing meta-document server with services that map exactly to a predefined categorization; and
(b) for those services not added at (a) but specified in the exported meta-document, adding services in the new meta-document available at the importing meta-document server with services that partially map to a predefined categorization, and have at least one dictionary and one key in common.

[c19]   19. The method according to claim 18, wherein dictionaries of two services are equivalent if they map to a predefined categorization.

[c20]   20. The method according to claim 18, wherein two keys of a service are said to map if they reduce to a common generic key.